

CorkSport Power Series True 3.5" inch Intake

2007-2013 Mazdaspeed 3, 2006-2007 Mazdaspeed 6



Thank you for purchasing the CorkSport Mazdaspeed 3 Turbo Inlet Pipe. The Big MAF 3.5" Intake is fabricated with a high polished 3.5 inch turbo inlet pipe and a True 3.5" inside diameter MAF housing. The Velocity stack design smooth's the air flow and increases the flow of air for maximum performance. If you plan on upgrading or have already upgraded your turbo, this upgrade is a must to keep your engine breathing smoothly. Get the best of both worlds by increasing power without losing throttle response.

Please let us know what you think by submitting a review at:
corksport.com/corksport-power-series-2007-2013-mazdaspeed-3-big-maf-3.5-intake.html

Pre-Installation Notes:



Re-calibration of MAF settings in the ECU are required for your car to run properly after installing the CorkSport 3.5" Intake with 89mm MAF housing.



Disconnection of battery and removal of battery box and Vehicle ECU are required for installation. Consult factory service manual or owner's manual for your car for specific details on disconnection of battery. Bridging the terminals on the battery can cause SERIOUS damage to vehicle electronics and can cause injury.



The CorkSport True 3.5" intake will not clear the stock ECU mounting location on Mazdaspeed 3. Replacement of the battery box and ECU mounting location are required to fit this intake. For Mazdaspeed 6, replacement of the battery mounting location is required to fit the 3.5" intake.



How our instructions work: To best cover all of our customers' experience levels, we have provided step-by-step instructions that both the novice and professional can follow.



These instructions were written for reference only and the use of a factory service manual is recommended. Please read these instructions thoroughly prior to starting installation.

Materials and Time:



General Info.

Part #: Axl-6-289
Time Est: 60-90 min
Wrench Rating: 2/5



Tooling List

3/8 Drive Ratchet
 6" 3/8 Drive Extension
 12" 3/8 Drive Extension
 10mm Deep Socket
 10mm Wrench
 3mm Allen Wrench
 Phillips Screwdriver
 Needle Nose Pliers
 Channel Lock Pliers



Parts List

1x CorkSport Turbo Inlet Pipe
 1x CorkSport 89mm MAF Housing assembly with Air Straightener
 1x Silicone Reducer 3.5 – 3.75"
 1x Silicone Reducer 3.5" – 2.25"
 1x Silicone Reducer 3.5" – 4"
 1x 4" Dry Flow Air Filter
 1x 10" Long Large ID Hose
 1x 6" Long Small ID Hose
 1x 57-65 T-Bolt Clamp
 2x 92-100 T-Bolt Clamps
 1x 95-103 T-Bolt Clamp
 2x 107-115 T-Bolt Clamp

Need Help With Your Installation?

Call (360) 260-CORK

Detailed Instructions

 These installation instructions were written using a 2013 Mazdaspeed 3.



Re-calibration of MAF settings in the ECU are **required** for your car to run properly after installing the CorkSport 3.5" Intake with 89mm MAF housing.

1. Remove the Factory Intake and Filter Housing

- a) Remove the top mount intercooler cover (TMIC) by removing the two 10mm bolts (red circles in Figure 1a).



Now is a good time to look at your intercooler and see if you have any bent fins or debris lodged in the intercooler fins. Removing debris and straightening the fins will improve the performance of the intercooler.



Figure 1a

- b) Loosen the two (2) 10mm hose clamps on the factory rubber intake elbow (red circle and green circle in Figure 1b).

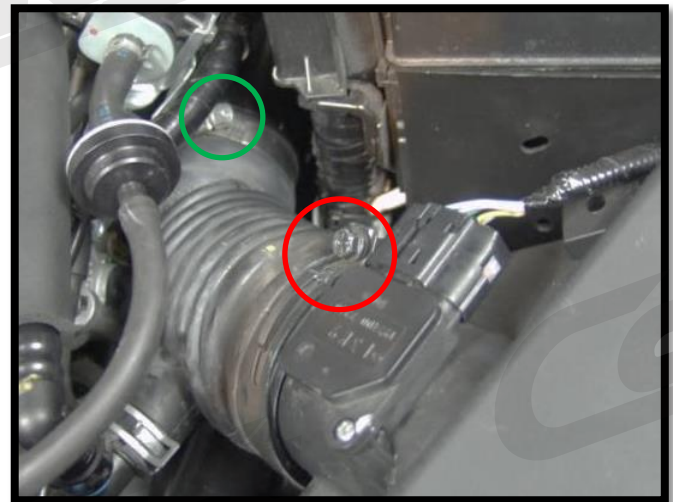


Figure 1b

- c) Unplug the MAF housing sensor located on the air filter housing (green circle in Figure 1c).

- d) Remove the two 10mm bolts on the air filter housing bracket and remove the bracket (shown in red circle in Figure 1c).

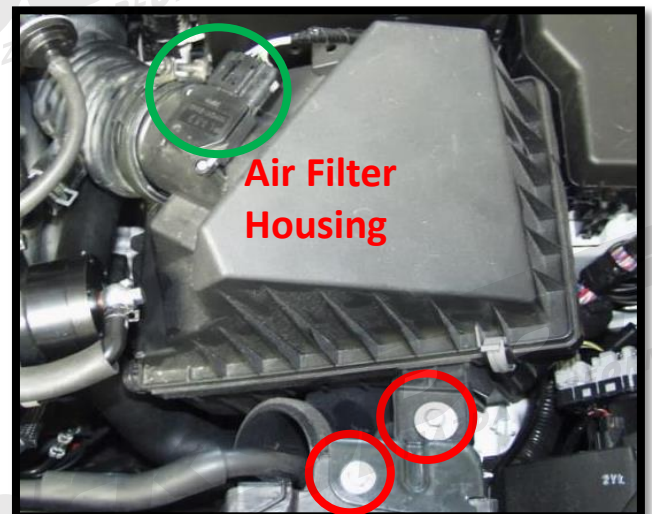


Figure 1c

1. Remove the Factory Intake and Filter Housing

e) **Remove the valve cover breather tube.** Push the hose connector toward the valve cover and press both sides of the colored clip simultaneously. Pull the hose away from the valve cover (Figure 1d).

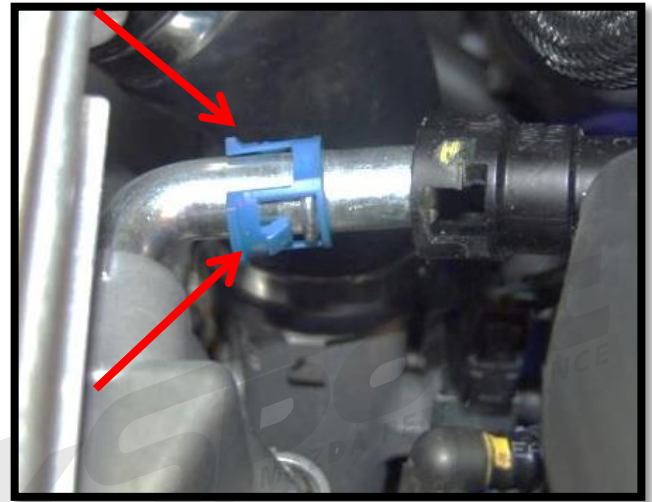


Figure 1d

f) **Pull up on the filter housing** to pop it free from the car and remove it along with the intake elbow and breather tube.

2. Remove the Battery and ECU

a) **Remove the battery box cover.** The cover is held on with two clips (shown with red arrows in Figure 2a). Pry the clips outward by hand and lift the front of the lid off of the box.

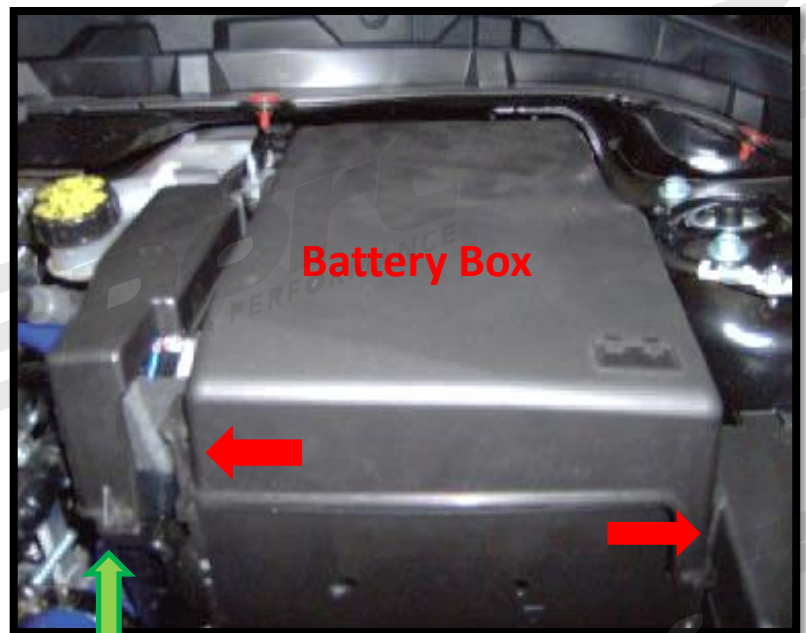


Figure 2a

Detailed Instructions:

2. Remove the Battery and ECU (continued)

b) **Disconnect the battery.** Disconnect the battery terminals with a 10mm end wrench. Refer to Figure 2b for negative (-) and positive (+). Disconnect the negative terminal of the battery first, then the positive terminal (Figure 2b).

c) **Remove the two 10mm nuts for the battery tie down bracket** (shown with red circles in Figure 2b).

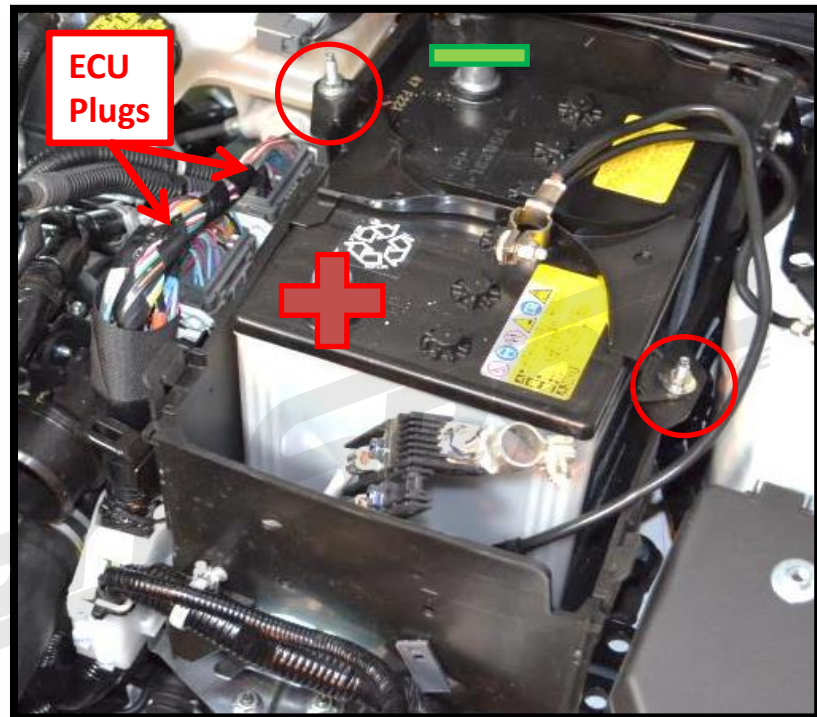


Figure 2b

d) **Remove the battery** from the battery box.

e) **Remove the front battery box panel.** Remove the MAF wiring harness clip (blue circle Figure 2c), and negative battery cable clip (purple circle Figure 2c), from the front battery box panel using needle nose pliers to compress the clips on the inside of the battery box. Then slide the panel upwards and remove it (green arrow in Figure 2c).

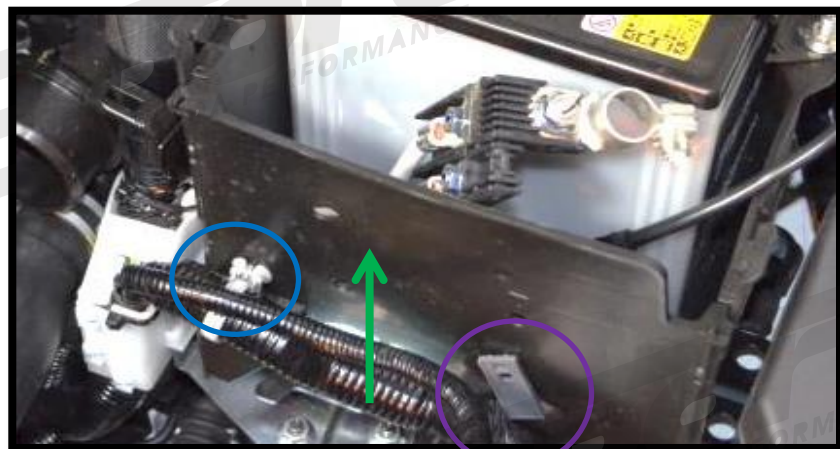


Figure 2c

2. Remove the Battery and ECU (continued)

- f) **Disconnect the ECU plugs** by pushing on the tabs (red arrows in Figure 2d) and pulling the white lock upward simultaneously (green arrows in Figure 2d). Refer to Figure 2b for location of ECU plugs and Figure 2d for close ups.

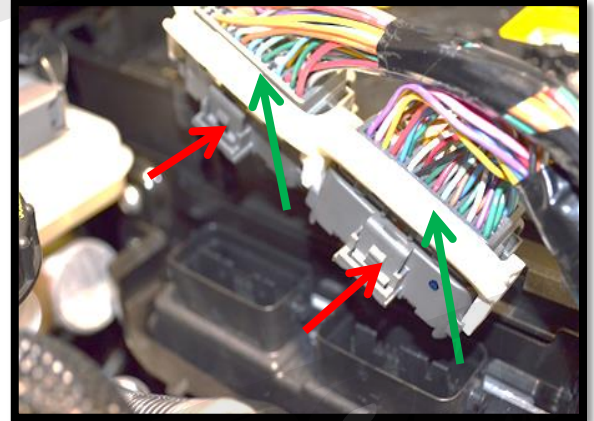


Figure 2d



When done correctly, this process should be effortless.

- g) **Remove the battery box.** Remove the three 10mm bolts in the bottom of the box, and remove the battery box and ECU (red circles Figure 2e).

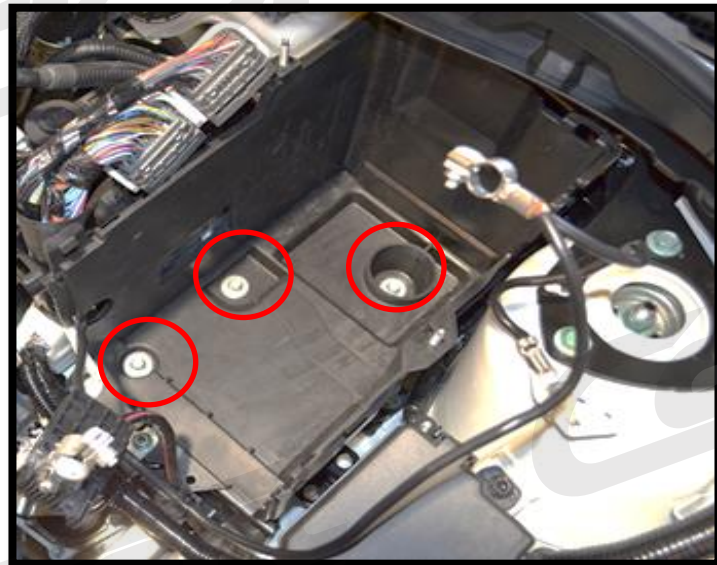


Figure 2e

3. Remove the Factory Turbo Inlet Pipe (TIP)

- a) **Using pliers, release the hose clamps (red circles in Figure 3a) located on the bypass valve hose.** Remove the hose from the car and save if you are re-using it. You can discard the rubber hose and spring clamps if you will be installing the optional CorkSport Silicone BPV Hose.

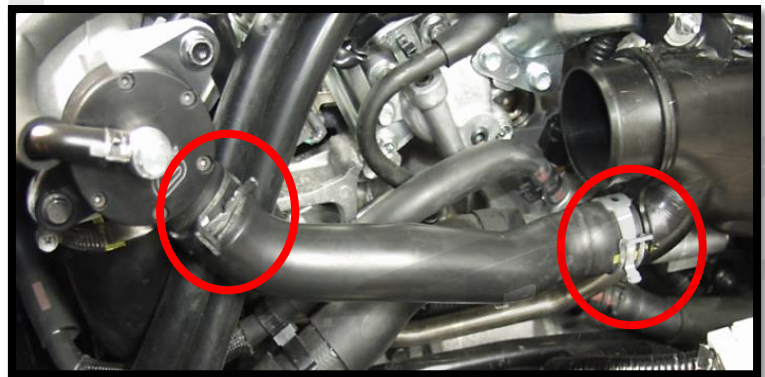


Figure 3a

3. Remove the Factory Turbo Inlet Pipe (TIP) (continued)

- b) Remove the 10mm nut that holds the stock turbo inlet pipe in place (blue circle in Figure 3b).
- c) Remove the two wiring harness clips (red arrows in Figure 3b) located on the stock turbo inlet pipe.
- d) Using needle nose pliers, remove the hose from solenoid fitting on the stock turbo inlet pipe and the boost control solenoid (see Figure 5d on next page and identified in Figure 3b by blue arrow).



Be very careful to not break the nipple off the boost control solenoid.



If you are having difficulty getting it loose, try rotating the hose to break the seal of the rubber to the plastic fitting and then pulling straight up. It takes a little force, but cleanly comes off.

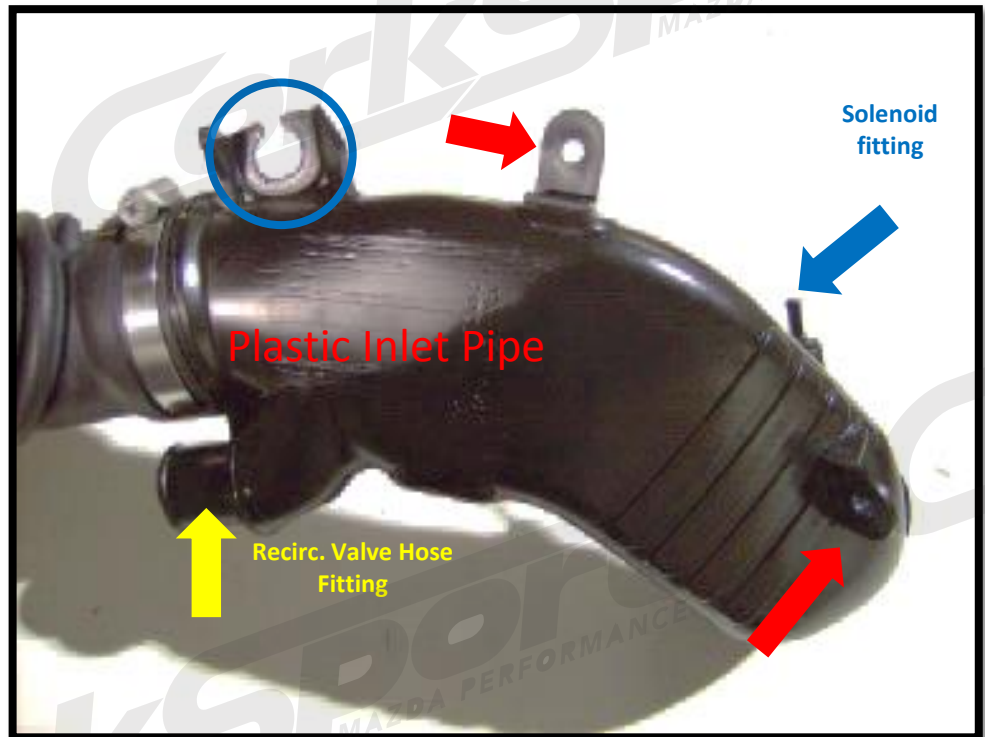


Figure 3b

- e) **Remove the plastic inlet pipe from the turbocharger.** Loosen the 10mm hose clamp at the turbo inlet, pull the stock turbo inlet pipe off of the turbocharger, and remove it from the car.

4. Assemble the CorkSport Turbo Inlet Pipe

- OEM K04 Turbo: Assemble the turbo inlet pipe** (shown w/the MAF housing and filter attached in [Figure 4a](#), you will attach the MAF housing and filter later. Attach the 2.25" to 3.5" silicone reducer onto the turbo side of the inlet pipe. Place the two clamps (92-100 and 57-65) onto the reducer and lightly tighten the 92-100 clamp (shown in [Figure 4a](#)). Leave the 57-65 clamp loose (Do not attach the MAF housing and air filter at this time).
- Aftermarket 4" Inlet Turbo: Assemble the turbo inlet pipe** (shown w/the MAF housing and filter attached in [Figure 4a](#), you will attach the MAF housing and filter later. Attach the 3.5" to 4" silicone reducer onto the turbo side of the inlet pipe. Place the two clamps (92-100 and 107-115) onto the reducer and lightly tighten the 92-100 clamp (shown in [Figure 4a](#)). Leave the 107-115 clamp loose (Do not attach the MAF housing and air filter at this time).
- Remove the rubber mounting grommet and washer from the factory turbo inlet pipe and install it on the CorkSport TIP** (circled in blue in [Figure 3b](#) and green on CorkSport TIP in [Figure 4a](#)).

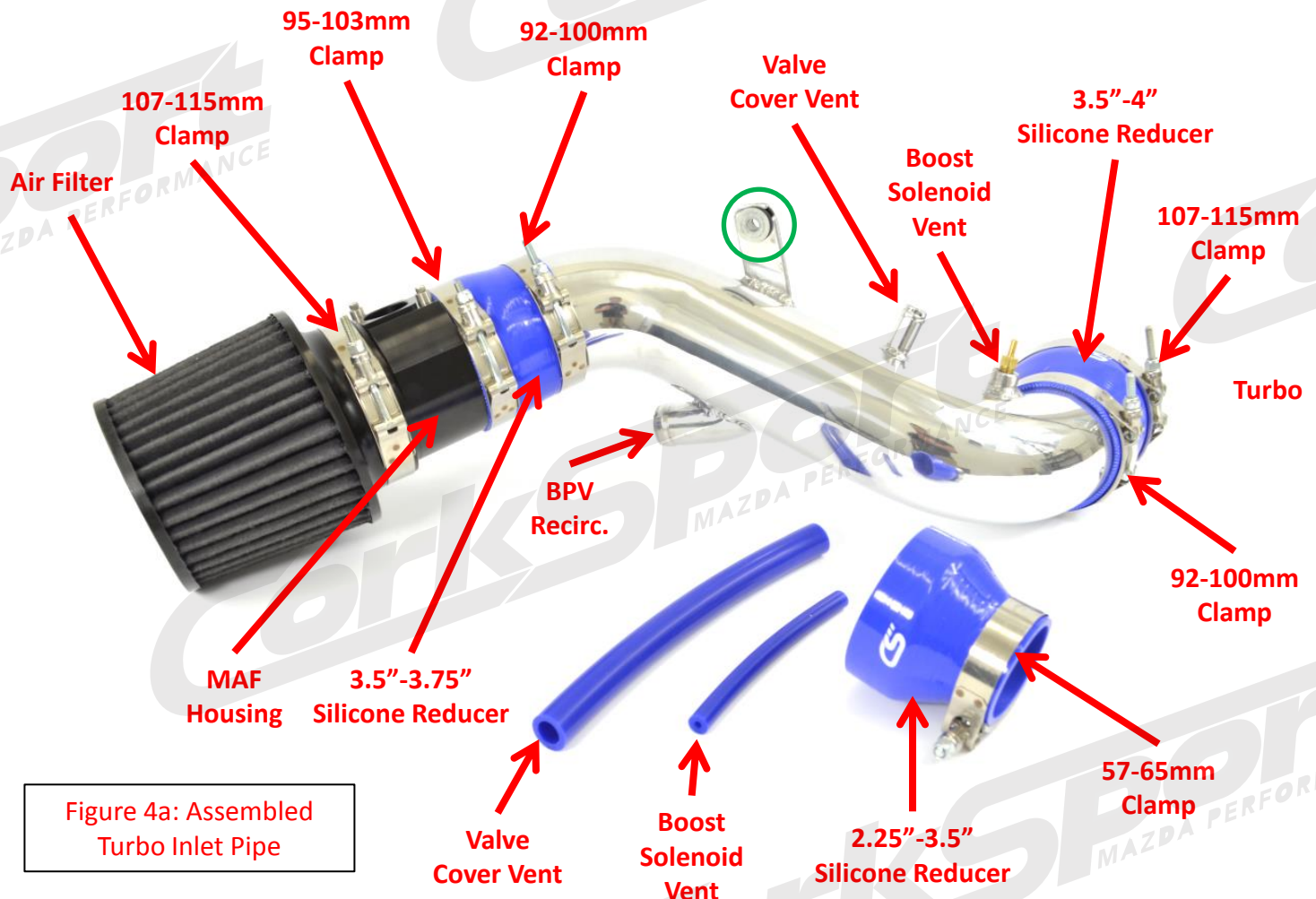


Figure 4a: Assembled Turbo Inlet Pipe

5. Install the CorkSport Turbo Inlet Pipe

a) OEM K04 Turbo: Place the CorkSport TIP in a similar orientation to the factory pipe.

- 1) Feed the silicone coupler end of the TIP toward the turbocharger inlet.
- 2) Align the bracket on the CorkSport turbo inlet pipe with the stud on the valve cover bracket (red circle in Figure 5c) .
- 3) Connect the 2.25" diameter silicone coupling over the end of the turbocharger compressor inlet, taking care to keep the loose hose clamp in place (shown in Figure 5a). This should fit easily - if not, the T-bolt clamp is probably too tight or is interfering.

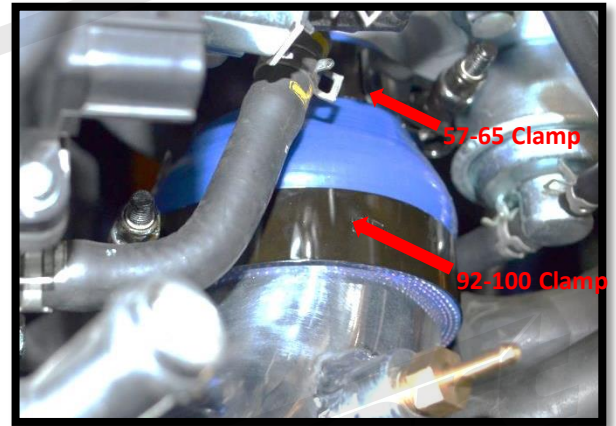


Figure 5a

b) Aftermarket 4" Inlet Turbo: Place the CorkSport TIP in a similar orientation to the factory pipe.

- 1) Feed the silicone coupler end of the TIP toward the turbocharger inlet.
- 2) Align the bracket on the CorkSport turbo inlet pipe with the stud on the valve cover bracket (red circle in Figure 5c).
- 3) Connect the 4" diameter silicone coupling over the end of the turbocharger compressor inlet, taking care to keep the loose hose clamp in place (shown in Figure 5a). This should fit easily - if not, the T-bolt clamp is probably too tight or is interfering.

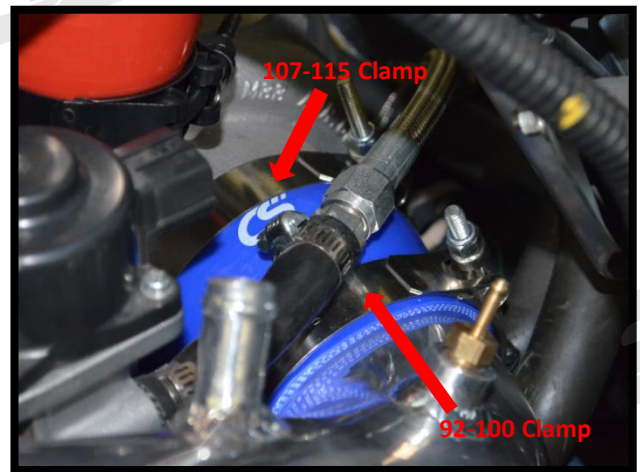


Figure 5b

c) Attach the bracket on the CorkSport turbo inlet over the stud on the factory valve cover bracket and hand tighten the nut onto the stud (red circle in Figure 5c). Check to ensure that the silicone coupling is still fully engaged between the turbocharger and turbo inlet pipe and tighten the nut the rest of the way. Adjust as needed before tightening the nut.



Figure 5c

d) Tighten the T-bolt clamps at the turbocharger compressor inlet.

5. Install the CorkSport Turbo Inlet Pipe (continued)

- e) Connect the supplied small ID silicone hose from the brass nipple to the boost control solenoid (green circles in Figure 5d).



Be very careful to not break the nipple off the boost control solenoid (Figure 5e).

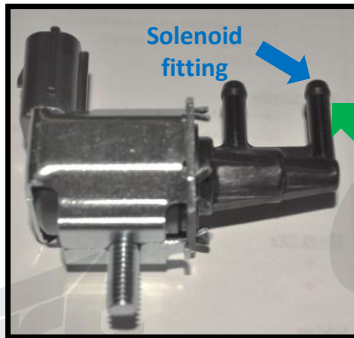


Figure 5e

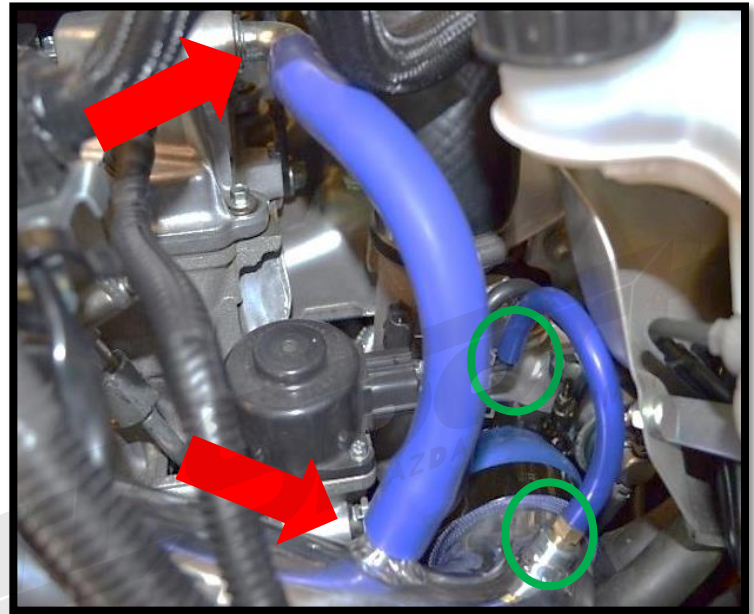


Figure 5d

- f) Connect the supplied large ID silicone hose to the valve cover and the large port on the TIP (red arrows in Figure 5d).

- g) Install the bypass valve hose.. Reuse the spring clamps if re-installing the factory rubber BPV hose, or use the T-bolt clamps supplied with the optional CorkSport silicone BPV hose (red circles in Figure 5f).

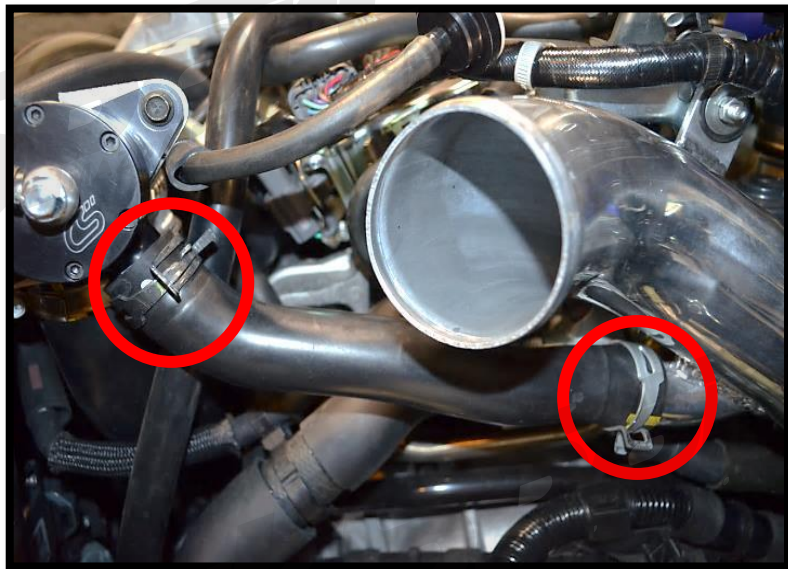


Figure 5f

5. Install the CorkSport Turbo Inlet Pipe (continued)

- h) Remove the plastic cover that houses the ECU.** Unscrew the two Phillips head screws (red circles indicate screw locations) and pull the cover upward (exposed ECU shown in [Figure 5g](#)).

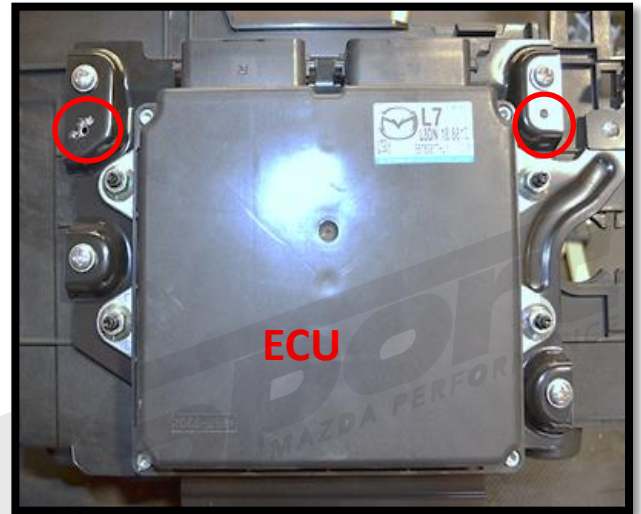



Figure 5g

-  If installing the CorkSport ECU and Battery Relocation kit skip this step.
- i) Install the battery box back into place**, with three 10mm bolts (shown in [Figure 2d](#)). Feed the battery terminal lines through the cutouts in the box.
- j) Install the ECU connectors** and latch the cam locks to seat the connectors into the ECU. Install the ECU cover over the connectors (shown in [Figure 2c](#)).
- k) Install the battery into the battery box.** First position and install the battery tie down. Next, install the positive battery cable onto its terminal and tighten the 10mm nut. Repeat with the negative battery terminal.
- l) Install the front cover onto the battery box and snap the wiring harness clips into place** (shown in [Figure 2b](#)).
- m) Install the battery box top back onto the battery box** ([Figure 2a](#)).

6. Install the CorkSport MAF Housing

- a) Remove the MAF sensor from the factory air filter housing by removing the two Phillips head screws and gently prying the sensor free (Figure 6a).

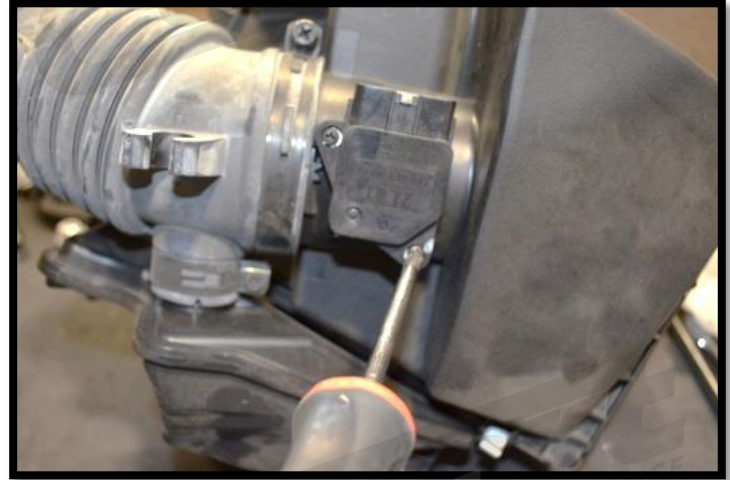


Figure 6a

- b) Install the MAF sensor into the CorkSport 89mm MAF housing and secure it with the two (2) supplied 3mm hex screws (Figure 6b circled in red).

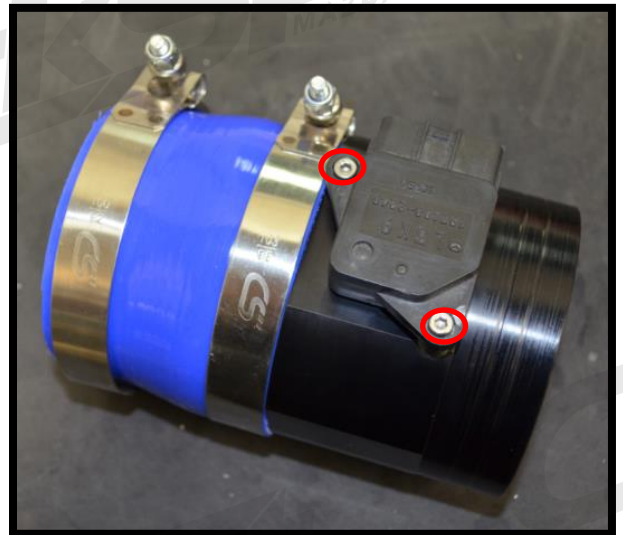


Figure 6b

- c) Place the 3.5" to 3.75" silicone reducer, along with the 92-100mm and 95-103mm supplied T-bolt clamps onto the MAF. Only tighten the MAF clamp at this time (Figure 6b). Make sure that the "AIRFLOW" sign points toward the silicone coupler.



Take care when installing the MAF sensor. You can bind the O-ring on the sensor and tear the O-ring. This will result in an intake leak causing CEL (Check Engine Light) and tuning issues.

- d) Place the CorkSport 4" Dryflow Air Filter onto the MAF with the 107-115mm T-bolt clamp (Figure 6c).



Figure 6c

6. Installing the CorkSport MAF Housing (continued)

- e) Install the silicone, MAF, and filter onto the turbo inlet pipe (Figure 6d).



Figure 6d

- f) Adjust the silicone elbow so that the MAF and filter are sitting level in the car and tighten the 92-100 T-bolt clamp with a 10mm deep socket or wrench (Figure 6d) .
- g) Connect the MAF sensor harness. Press it onto the sensor firmly until it “clicks”. (red circle in Figure 6d)
- h) Replace the intercooler cover, making sure that the metal bracket under the cover is latched onto the tab in the back of the intercooler tank casting. Lower the front of the intercooler cover and install the two 10mm bolts.

This completes the installation of your CorkSport 3.5” Intake. You will need to re-calibrate the MAF sensor with an ECU reflashing device such as the COBB Accessport.



If there are issues with the idle, check your connections and hose clamps for tightness and check to make sure the MAF sensor is fully seated in the housing and not cocked at a non parallel angle relative to the housing surface. After a test drive, recheck all hose clamps again for tightness.

What's Next:

[CORKSPORT Mazdaspeed3 Rear Swaybar](#)

Remove the tendency to overpower the front tires under hard cornering and minimize traction robbing body lean with the CorkSport Mazdaspeed 3 Rear Adjustable Sway Bar. Compressing inside suspension, the CorkSport Mazdaspeed 3 Rear Sway Bar effectively increases the spring rate on side of the suspension which is compressed most and its adjustability allows you to fine tune the handling.



[CORKSPORT Mazdaspeed MZR Bypass Valve](#)

Add performance and style while protecting your turbo with the Patent Pending CorkSport Mazdaspeed MZR Bypass Valve. Using an innovative patent pending design utilizing a wave spring, we were able to reduce the spring height of the OEM Bypass Valve by 50%. This size reduction provides the same amount of force, while accelerating the speed of the valve. By increasing speed the Bypass Valve effectively increases the life of your turbo by preventing premature wear since the BPV can safely move at speeds 33% faster than stock or other valves.



[CorkSport Aluminum Oil Catch Can](#)

Enhance the reliability of your engine and improve performance and fuel economy with the CorkSport Oil Catch Can. By adding an oil catch can, you will increase the longevity of your engine by helping keep unclean crankcase vapors and oil out of the engines intake. Made of billet aluminum for strength, the CorkSport Oil Catch Can includes everything you need for a complete install. Don't let your Mazda get contaminated by sediment, crankcase vapors, or unclean oil. With the CorkSport Oil Catch Can you will remove unwanted debris that would normally contaminate the intake tract. This allows for cleaner air entering the engine, lower detonation rates and increases longevity.



MAF Calibration Procedure

Start by going to <http://www.cobbtuning.com/> and downloading a copy of Accesstuner Race for your vehicle.

Connect your Cobb AP to your computer and install Accesstuner Race.

1. Once installed, open the program and select file>load map.
Load the current map you are running on your car.

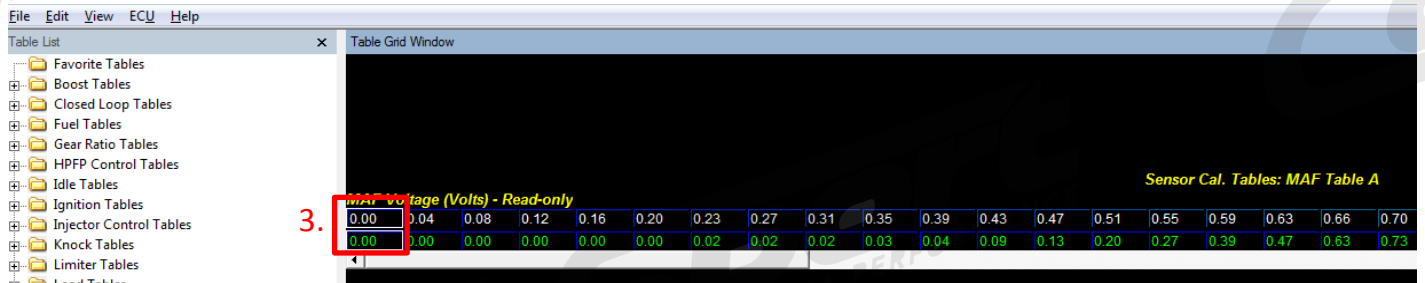
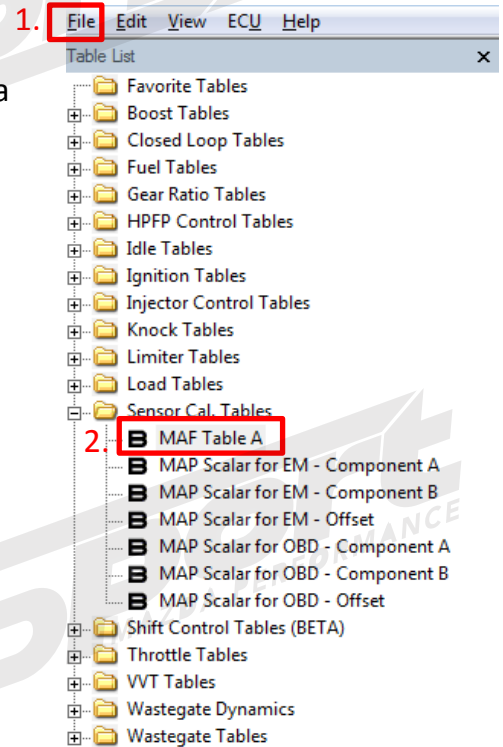
Save this map to another name to make sure you save the original file.

2. Select Sensor Cal. Tables > MAF Table A

3. Copy the supplied MAF calibration into the table by copy and pasting the entire MAF calibration table.

<http://corksport.com/support/instructions/Ax1-6-289MAFCalibration.txt>

If you have a Gen1 Mazdaspeed3 or Mazdaspeed6 you will have a MAF Table B as well that you will have to copy the calibration into



Re-calibration of MAF settings in the ECU will change how your car runs. Without doing this calibration your car may not start. A custom tune afterward is required for your car to run properly after installing the CorkSport 3.5" Intake with 89mm MAF housing.